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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,176	10/30/2003	Oh-Kee Kwon	3364P149	1024
8791	7590 09/30/2005		EXAM	INER
22	OKOLOFF TAYLO	FINNEREN, RORY B		
12400 WILSH SEVENTH FL	IRE BOULEVARD OOR		ART UNIT	PAPER NUMBER
LOS ANGELES, CA 90025-1030			2828	

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/699,176	KWON ET AL.
Office Action Summary	Examiner	Art Unit
	Rory Finneren	2828
The MAILING DATE of this communication appeariod for Reply	pears on the cover sheet with th	e correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICAT 136(a). In no event, however, may a reply b will apply and will expire SIX (6) MONTHS to e, cause the application to become ABANDO	ION. se timely filed from the mailing date of this communication. ONED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on 30 C	October 2003.	
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	s action is non-final.	
3) Since this application is in condition for alloward closed in accordance with the practice under the condition of the c		
Disposition of Claims		
4) ☐ Claim(s) 1-6 is/are pending in the application. 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-6 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	ewn from consideration.	
Application Papers		·
9) ☐ The specification is objected to by the Examina 10) ☑ The drawing(s) filed on 30 October 2003 is/are Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the E	e: a) ☐ accepted or b) ☒ object e drawing(s) be held in abeyance. ction is required if the drawing(s) is	See 37 CFR 1.85(a). s objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
a) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureat* See the attached detailed Office action for a list	nts have been received. Its have been received in Appli Pority documents have been rec Pau (PCT Rule 17.2(a)).	cation No eived in this National Stage
Attachment(s)  1)  Notice of References Cited (PTO-892)	4) ☐ Interview Sumn	nary (PTO-413)
<ul> <li>Notice of References Cited (PTO-692)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 10/30/03 1/31/05.</li> </ul>	Paper No(s)/Ma	

#### **DETAILED ACTION**

### **Drawings**

Figures 4, 5, 6, and 8 should be designated by a legend such as --Prior Art--because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Claim Objections

Claims 1 and 6 are objected to because of the following informalities: For consistency, in the second line of each claim, the word "beams" should appear after "light". Appropriate correction is required.

### Claim Rejections - 35 USC § 112

Claims 4 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites the limitation "the fiber" in line 2. There is insufficient antecedent basis for this limitation in the claim.

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Claim 5 recites the limitation "the fiber" in line 2. There is insufficient antecedent basis for this limitation in the claim.

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### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 3, and 6 are rejected under 35 U.S.C. §102(b) as being anticipated by Hoose (US 20020146054 A1).

With respect to claim 1, Hoose teaches the claimed tunable wavelength semiconductor laser diode comprising the claimed laser diode array (Fig. 1, #12a, 12b, 12c; paragraph [0034]), the claimed combiner (Fig. 1, #23; paragraph [0035], line 2), the claimed lens (Fig. 1, #16; paragraph [0029], line 4), the claimed grating (Fig. 1, #14, #21; paragraph [0035], line 5), and the claimed reflector (Abstract, line 4).

As to claim 2, Hoose teaches a laser diode including a multi-channel FP laser diode array (Paragraph [0020]).

Regarding claim 3, Hoose teaches that the combiner has an optical waveguide configuration (Paragraph [0035], lines 13-14).

With respect to claim 6, Hoose teaches the claimed tunable wavelength semiconductor laser diode comprising the claimed multi-channel diode array (Fig. 12a, 12b, 12c), the claimed AWG (array waveguide grating) (Paragraph [0016]), the claimed

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collimating lens (Fig. 1, #16), the claimed grating (Fig. 1, #21), and the claimed reflector (Abstract, line 4).

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. §103(a) as being unpatentable over Hoose in view of Missey (US 20020064192 A1).

As to claim 4, Hoose teaches the invention set forth above except for the wavelength of the light beam output to the fiber being controlled by an arrangement interval of the laser diode array. Missey teaches that the wavelength of the light beam output to the fiber is controlled by an arrangement interval of the laser diode array (Paragraph [0011]). It would have been obvious to one skilled in the art at the time of the invention to modify the teaching of Hoose so that the wavelength of the light beam output to the fiber is controlled by an arrangement interval of the laser diode array for the purpose of tuning the output of the laser diode without changing the focal length of the lens.

Claim 5 is rejected under 35 U.S.C. §103(a) as being unpatentable over Hoose in view of Zhiglinsky (US 5428635 A).

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Regarding claim 5, Hoose teaches the invention set forth above except for a wavelength of the light beam output to the fiber being controlled by a focal length of the lens. Zhiglinsky teaches a wavelength of the light beam output to the fiber being controlled by a focal length of the lens (Col. 10, line 61 to Col. 11 line 15). It would have been obvious to one skilled in the art at the time of the invention to modify the teaching of Hoose so that a wavelength of the beam is controlled by a focal length of the lens for the purpose of tuning the output of the laser diode without changing the arrangement of the laser diode array.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rory Finneren whose telephone number is (571) 272-2243. The examiner can normally be reached on Mon. - Fri. 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minsun Oh Harvey can be reached on (571) 272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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